No amendments to the drawings.

REMARKS

Reconsideration of this application is requested.

CLAIM OBJECTIONS

Claim 12 and 27 were objected to because of certain informalities regarding typos in each claim. These claims have been amended as suggested by the Examiner and the Examiner is thanked by the applicants for pointing out the informalities.

Claims 1-26, 28-32, 34 and 36 were rejected under 35 U.S.C. §102(b) as being anticipated by Ralph et al. article in the "Electrochemical Society Journal". The Electrochemical Society proceedings vol. 2001-16, the Examiner particularly relying on the first full paragraph on page 469. It is believed that the Examiner has misunderstood the nature of both the reference and the invention. The article referenced by the Examiner, of course, was written by two of the three inventors of this case and they are imminently familiar with the article. The article relates to an iron based solid oxide fuel cell cathode but the principal difference is that in the paper, all of the materials are cation stoichiometric, that is they all have a 1:1 ratio of A:B cations. The subject invention is not like that at all. In the subject invention, the iron based cations are all what is called "off stoichiometric" but still single phase, that is materials like $La_{0.7}Sr_{0.2}FeO_3$. This formula is a non-stoichiometric with holes in the A site. This is very different and of significant importance because the invention

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provides a new method to increase conductivity while dropping the temperature of operation of the solid oxide fuel cells to be in line with practical requirements. On the other hand, stoichiometric iron perovskites are well known and have been well studied. Referencing claim 1 of the present invention, it is seen that the A site, that is combination of A and A' will always be less than 1 and that is because although X ranges from 0-1 Y is always a positive number between 0.01 and 0.3. Moreover, it is stated in the claim that if either A or A1 is zero the remaining A or A' is deficient. This clearly distinguishes from the Ralph et al. article in which stoichiometric iron perovskites are reported and disclosed.

In view of this distinction, it is respectfully suggested that the Examiner withdraw the rejection under 35 U.S.C. §102(b) based on the Ralph et al. article and allow claims 1-26, 28-32, 34 and 36.

Claims 12 and 33 were rejected under 35 U. S.C. §103(a) as being unpatentable over the Ralph et al. article in view of the Nishihara et al. U.S. patent no. 5,604,048. The applicants respectfully traverse the rejection.

The Ralph et al. disclosure has been previously discussed and shown to be entirely lacking in disclosing the subject matter of the present invention. The Examiner's citation to the Nishihara et al. '048 patent cites only part of the formula and therefore in an incomplete citation. The Examiner is directed to the exact portion of the Nishihara et al '48 patent cited in which the following formula is laid out $(La_{1-x-y}A_xB_y)_zMn_{1-u}C_u(_vO_\delta)$. The Examiner is directed to the limits for the subset numbers wherein it is seen that the combination of La and AB always is in the range between 0.9 and 1.0 while the Mn-C moiety always contains at least 0.5 mole percent Mn.

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Therefore, the Nishihara et al. '048 patent does not show that which the Examiner suggested. There is no suggestion or teaching in the Nishihara et al. '048 patent that it would be desirable to have the Mn-C moiety be void of Mn and only contain Fe as required in the present invention. The Examiner is not permitted to modify the Nishihara et al. 048 reference in contradistinction to the teaching of the reference in order to replicate the invention.

The Examiner's conclusion that it would be obvious to provide Ralph with La moiety that is about 0.6 mole fraction and A' of Sr present at 0.25 mole fraction is completely at odds with teaching of the reference since Y is defined always as a positive number and X is always a positive number so that both of the subsets A and B must be combined with La in the formula. Therefore, the Examiner is entirely incorrect in her modification of the Nishihara et al. '048 reference in order to render obvious the present invention. As stated before, the Examiner cannot ignore the teaching of a reference in order to modify it to her ends. It is submitted that claims 12-33 are patentable in view of any appropriate combination of the Ralph et al. reference and the Nishihara et al. '048 patent.
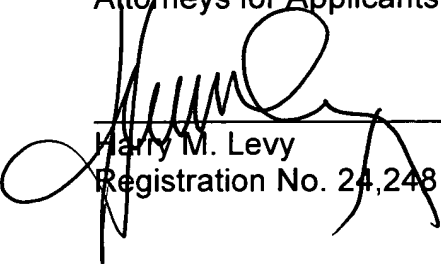
Finally, claim 35 was rejected under 35 U.S.C. 103(a) as being unpatentable over the Ralph et al. reference in view of the Ruka et al. U.S. patent no. 5,916,700. Again, the Ruka et al. '700 patent for whatever it is cited for, is simply insufficient to remedy the inadequacies of the Ralph et al. reference and the Nishihara et al. '048 patent previously disclosed. Again, the Ruka et al. '700 patent teaches an A site of at least four elements and a B site of Mg. Whatever else is taught by the reference, it is insufficient on which to base a rejection under 35 U.S.C. §103.

In view of the foregoing, it is respectfully submitted that the claims as now presented, with the correction of the typographical errors in claims 12 and 27, are directed to patentable subject matter and the allowance thereof is requested.

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